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REMARKS

Applicant again respectively requests that all correspondence in this case be addressed to McGinn & Gibb, PLLC 8321 Old Courthouse Road, Suite 200, Vienna, VA 22182-3817, (703) 761-4100, Customer No. 21254.

Applicant gratefully acknowledges the Examiner's helpful comments made during a telephone conversation on December 2, 2004. In that telephone conversation, the Examiner indicated to Applicant's undersigned representative that if claims 74 and 75 were not presented, the case would likely be placed in condition for allowance. Applicant notes that this Amendment is substantially the same as the Amendment filed herein on October 29, 2004, except that claims 74 and 75 have not been presented. Therefore, Applicant respectfully submits that this Application is in condition for immediate allowance.

Applicant notes that an Excess Claim Fee Payment Letter was submitted on May 17, 2004 to cover the cost of five (5) excess independent claims.

Claims 1-73 are all the claims presently pending in the application. Claims 1-3, 5-6, 17, 20-25, 28-31, 36-41, 43-44 and 55 have been amended to more particularly define the invention. Claims 58-73 have been added to claim additional features of the claimed invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

A Supplemental Reissue Declaration will be submitted shortly.

Applicant further notes that the patent will be promptly surrendered by Applicant upon an indication from the Examiner that the case would otherwise be in condition for allowance.

Applicant gratefully acknowledges the Examiner's indication that claims 1-70 are allowed. However, Applicant respectfully submits that all of the claims are allowable.

Claims 71-73 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Li (U.S. Patent No. 5,920,859). Claims 71-73 stand rejected under 35 U.S.C. § 102(e) as being

anticipated by Page (U.S. Patent No. 6,285,999). Claims 71-73 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Brown (U.S. Patent No. 5,875,446).

These rejections are respectfully traversed in view of the following discussion.

I. THE CLAIMED INVENTION

The claimed invention (e.g., as recited in claim 71 and similarly recited in claims 72-73), is directed to a computer program product, for use with a computer system, for directing the computer system to execute a search of information resources, the resources having content-based links between each other, to identify a desired subset of the information resources which satisfy a desired criterion . The computer program product includes a computer-readable medium, means, provided on the recording medium, for directing the computer system to identify an initial set of information resources, and means, provided on the recording medium, for directing the computer system to define initial authoritativeness information for the initial set. Importantly, the computer program product also includes means, provided on the recording medium, for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to execute: producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set, and producing second authoritativeness information about a set of information resources having links that point to resources of the input set. The computer program product also includes means, provided on the recording medium, for directing the computer system to produce a final set of information resources based on the first and second authoritativeness information.

Conventional computer systems obtain a plurality of documents including linked documents, linking documents, and linked and linking documents. Such conventional systems rank documents based only on the quality of the backlinks to the documents.

One aspect (e.g., as recited in claim 71) of the claimed invention, on the other hand, includes means, provided on the recording medium, for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to execute: producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set, and producing second authoritativeness information

about a set of information resources having links that point to resources of the input set (Kleinberg at col. 4, lines 43-65).

These novel features allow the claimed invention to be more versatile than conventional systems.

II. THE PRIOR ART REFERENCES

A. The Li Reference

The Examiner alleges that Li teaches the claimed invention as recited in claims 71-73. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Li.

Li discloses a search engine for retrieving documents pertinent to a query. The Li search engine indexes documents with terms in the hyperlink pointing to that document (Li at col. 3, lines 47-54).

However, contrary to the Examiner's allegations, Li does not teach or suggest " "*means, provided on the recording medium, for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to execute: producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; and producing second authoritativeness information about a set of information resources having links that point to resources of the input set*", as recited in claims 71 and similarly recited in claims 72-73.

As noted above, conventional computer systems obtain a plurality of documents including linked documents, linking documents, and linked and linking documents. Such conventional systems rank documents based only on the quality of the **backlinks** to the documents.

The claimed invention, on the other hand, in one aspect, includes means for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to produce first authoritativeness information about a set of information resources pointed to by links in resources of the input set, and second authoritativeness information about a set of information resources having links that point to resources of the input set (Kleinberg at Figure 3; col. 7, line 50-col. 8, line 15). In another aspect, the claimed

invention identifies web pages that point to a web page in the initial set of web pages and web pages that are pointed to from the web page in the initial set of web pages (Kleinberg at col. 8, lines 33-38). In another aspect, the claimed invention identifies an initial set of web pages including web pages selected based on a key-word based query, web pages which link to the web pages selected based on said key-word based query and web pages which are linked to from the web pages selected based on the key-word based query (Kleinberg at Abstract; col. 4, lines 44-65).

Clearly, these novel features are not taught or suggested by Li. Indeed, Applicant would point out that **claims 71, 72 and 73 are substantially similar to claims 1, 20 and 39 in the originally issued patent**. Therefore, these claims have basically already been examined by an Examiner at the U. S. Patent Office and determined to be patentable.

Further, the Examiner attempts to rely on col. 4 and col. 8 in Li to support his arguments. However, these passages merely disclose indexing documents according to hyperlinks only pointing to those documents. That is, Li is not concerned with hyperlinks within the document that point to other documents.

An aspect of the claimed invention, however, (as recited in claim 71) produces first authoritativeness information about a set of information resources pointed to by links in resources of the input set, **and** second authoritativeness information about a set of information resources having links that point to resources of the input set.

For example, as illustrated in Figure 3 of Kleinberg, in the claimed invention an initial set of pages P 10 may be obtained, for example, by performing a keyword-based query (Kleinberg at col. 7, lines 20-50). Another set Q 18 including all **pages pointed to by a page** in set P 10 may then be obtained, and another set R 22 including all **pages that point to a page** in P 10 may also be obtained (Kleinberg at col. 7, line 50-col. 8, line 28). These pages form a "neighborhood" (e.g., sets P, Q and R) which may be considered relevant and therefore, returned to the user performing the search (Kleinberg at Abstract).

This is clearly not taught or suggested by Li. Instead Li is only concerned with hyperlinks that point to a document. That is, nowhere is Li concerned with documents that are pointed to by the initial document.

Therefore, Applicant submits that there are elements of the claimed invention that are

not taught or suggest by Li. Therefore, the Examiner is respectfully requested to withdraw this rejection.

B. The Page Reference

The Examiner alleges that Page teaches the claimed invention as recited in claims 71-73. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Page.

Page discloses a method for ranking nodes in a linked database. Specifically, in the Page method, for a plurality of linked and linking documents (the linked documents being pointed to by a link in the linking documents) a linked document is assigned a score based on the scores of the linking documents (Page at col. 8, lines 55-66).

However, contrary to the Examiner's allegations, Page does not teach or suggest "*means, provided on the recording medium, for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to execute: producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; and producing second authoritativeness information about a set of information resources having links that point to resources of the input set*", as recited in claims 71 and similarly recited in claims 72-73.

Clearly, Page does not teach or suggest the novel features of the claimed invention. Indeed, Page merely teaches obtaining a plurality of documents including linked documents, linking documents, and linked and linking documents, and ranking a document **based only on the quality of the backlinks** to the document (Page at Abstract; col. 3, lines 20-30).

Further, Page may disclose "obtaining a plurality of documents" (Page at col. 8, line 57). However, nowhere does Page disclose how those documents may be obtained.

The Examiner attempts to rely on Figure 3, col. 4, lines 5-49, col. 6, lines 11-55, col. 7, lines 23-5, and col. 8, lines 10-41 to support his position. However, neither the figure nor any of these passages teach or suggest the above-referenced novel features of the claimed invention.

For example, Figure 3 merely shows a flowchart in which step 101 includes "SELECT AN INITIAL N-DIMENSIONAL VECTOR p_0". However, nowhere does the

Figure explain how the vector may be selected. Further, the passage at col. 4, lines 5-49 merely discusses documents A, B and C. However, nowhere does the passage discuss how these documents are obtained. Further, columns 6-8, like col. 4 merely discuss Documents A, B and C, but do not discuss their origin. Indeed, this is an important difference between the claimed invention and the Page system.

In fact, as pointed out above with respect to the Li reference, in the claimed invention an initial set of pages P 10 may be obtained, for example, by performing a keyword-based query (Kleinberg at col. 7, lines 20-50). Another set Q 18 including all **pages pointed to by a page** in set P 10 may then be obtained, and another set R 22 including all **pages that point to a page** in P 10 may also be obtained (Kleinberg at col. 7, line 50-col. 8, line 28). These pages form a "neighborhood" (e.g., sets P, Q and R) which may be considered relevant and therefore, returned to the user performing the search (Kleinberg at Abstract).

This is clearly not taught or suggested by Page. Instead Page is only concerned with hyperlinks that point to a document. Indeed, this is overwhelmingly obvious from the Abstract which states, "**[t]he rank assigned to a document is calculated from the ranks of documents citing it**" (Page at Abstract). Nowhere does Page teach or suggest calculating a rank for a certain document from the ranks of the documents which are cited by that certain document. Indeed, this is contrary to Page's teachings that a document is relevant "if it is highly cited by other documents" (Page at col. 2, lines 49-51).

Therefore, Applicant submits that there are elements of the claimed invention that are not taught or suggest by Page. Therefore, the Examiner is respectfully requested to withdraw this rejection.

C. The Brown Reference

The Examiner alleges that Brown teaches the claimed invention as recited in claims 71-73. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Brown.

Brown discloses a system for identifying and hierarchically grouping one or more objects that are topically relevant to a user query and/or have a structural relation to one another (Brown at Abstract).

However, contrary to the Examiner's allegations, Brown does not teach or suggest "*means, provided on the recording medium, for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to execute: producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; and producing second authoritativeness information about a set of information resources having links that point to resources of the input set*", as recited in claims 71 and similarly recited in claims 72-73.

That is, the claimed invention may identify both "hub pages" (e.g., set R in Figure 3 of Kleinberg) and "authority pages" (e.g., set Q in Figure 3 of Kleinberg) to obtain a "neighborhood"(Kleinberg at col. 8, lines 6-42). The pages in the "neighborhood" may be refined to return the most relevant pages in response to a user query.

Clearly, Brown does not teach or suggest the novel features of the claimed invention. Indeed, the Examiner attempts to rely on Figure 6 and columns 3-10 and 13-14 to support his position. However, the Examiner is clearly incorrect.

In fact, Brown describes Figure 6 as illustrating "an object catalog" and "a table of named attribute values for objects in the catalog" (Brown at col. 5, lines 50-52). Clearly, Figure 6 has nothing to do with the claimed invention.

Indeed, like Li and Page, Brown merely teaches using **only backlinks** to rank the relevance of an object. Specifically, Brown teaches that only "parents" (e.g., objects which include a hyperlink to a topically relevant object) are "structurally relevant objects". This is made very clear in Brown at col. 9, lines 9-47. That is, nowhere does Brown teach or suggest that objects that are linked to from a topically relevant object are "structurally relevant objects".

Thus, for example, with respect to claim 71, nowhere does Brown teach or suggest **producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set**, and producing second authoritativeness information about a set of information resources having links that point to resources of the input set.

Therefore, Applicant submits that there are elements of the claimed invention that are not taught or suggest by Brown. Therefore, the Examiner is respectfully requested to

withdraw this rejection.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-73, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

Date: 12/9/04

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the foregoing Amendment was filed by facsimile with the United States Patent and Trademark Office, Examiner Charles Rones, Group Art Unit #2175 at fax number (703) 872-9306 this 9th day of December, 2004.

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